administration of the proper dose. The author is of the opinion that in about 50 per cent. of the cases of hay-fever asthma the attack can be controlled by prophylactic and specific treatment. It is essential that the degree of sensitiveness be determined before administering the treatment. This may be done by testing the patient with varying dilutions of the pollen extract. He considers that it is better to give the treatment throughout the year rather than a short period of treatment during the hay-fever season. Regarding drug therapy, the author speaks of the beneficial effect of epinephrin given hypodermically in dilutions of 1 to 1000 in controlling the acute attack of dyspnea. The effects generally last for from one-half to two hours. As a rule, patients gradually become accustomed to repeated doses of epinephrin, so that the amount given has to be increased from time to time, and finally often a complete tolerance to the drug is developed and no relief is obtained from its administration. Atropin given subcutaneously or intramuscularly in gradually increasing doses up to the point of tolerance will frequently give relief. KI by mouth is frequently of distinct value. The inhalation of fumes of burning stramonium leaves and potassium nitrite gives relief in acute paroxysms.

PEDIATRICS

UNDER THE CHARGE OF

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A Case of Hypersensitiveness to Cows' Milk.—Park (*Am. Jour. Dis. Children*, January, 1920), reports a case of a child who is now three years old. At six weeks it was given a supplementary feeding of a cow's milk formula once a day. It took about one ounce, amounting to about 10 c.c. of cow's milk. It fell asleep and when aroused it vomited. It was very pale and heavy. It refused the next breast nursing, and vomited again, after which it fell into a heavy sleep. It took the next breast feeding and the next day it seemed normal. Thinking that the baby was hypersensitive to cow's milk it was given a teaspoonful of a mixture of milk diluted one-half with water. After taking this it was nursed and immediately fell asleep. It occasionally opened its eyes and yawned. The face became flushed. About five hours after taking the mixture it vomited in small amount, and ten minutes later it vomited a large amount of bile-stained fluid. It became exceedingly pale and seemed greatly prostrated. Shortly after vomiting it had two large loose stools containing mucus. It refused the next nursing, and slept heavily until the next nursing period when it nursed in a normal manner. After cutaneous test there were delayed general reactions locally, the tests were negative. It was able to take goat's milk without any difficulty. Intracutaneous tests of various proteins were done and gave slight local and delayed general reactions. There was a marked but delayed local reaction to cow's milk. The same general effects followed the accidental administration of a condensed milk mixture. An attempt was made to desensitize the baby, and after some time and with perseverance this was accomplished. He is now able at three years to take a pint of cow's milk daily without any difficulty. At eight months of age it was necessary to wean him from the breast, and it was necessary to feed him on goat's milk, which singularly enough gave rise to no reaction. From the evidence of the case the author considers this peculiarity as having been inherent in the germ plasm.

Dextrose Tolerance in Atrophic Infants.—MATTILL, MAYER and SEINER (*Am. Jour. Dis. Children*, January, 1920) remind us that by the Woodyatt method it has been shown that the tolerance of adults was from 0.8 to 0.9 grams per kilogram per hour. In this study they gave dextrose solutions intravenously to four non-atrophic infants, ranging in age from five to fifteen months. In these cases the tolerance was found to be 0.8 to 0.9 gram per kilogram of body weight per hour. Seven atrophic infants were studied. They showed emaciation, tendency to subnormal temperature, lack of turgor and grayish color of the skin. Their weights were stationary or nearly so. The stools were good. In no case was tolerance below 1.4 or 1.5 gram, per kilogram of body weight per hour. Other authors have also found that the metabolism of the atrophic infant proceeded to a higher level than that of the normal infant. McClure and Sauer have observed that atrophic infants have a higher surface temperature than normal infants and there is an increased insensible perspiration. An increased sugar tolerance seems to fit in very well with such observations. It was observed that the readings were constant in the cases in which several injections were given.

Mental Defectives in a Southern State.—ANDERSON (*Mental Hygiene*, October, 1919) gives a report of the Georgia Commission on Feeble-mindedness and the survey of the National Committee for Mental Hygiene. As a result of this survey he says that 40 per cent. of the inmates of the almshouses were feeble-minded. Feeble-minded families had been found in the State that had been supported by church and organized charities for three or four generations. A study of a typical orphanage showed that 28.7 per cent. of the children were feeble-minded. If the same percentage exists in the other orphanages in the State, there are at least 810 feeble-minded in orphanages who need special care and training in a school for the feeble-minded. At the state prison farm 17.5 per cent. of the inmates were feeble-minded. The striking fact at this institution was not so much the presence of feeble-minded men, but the great number of other forms of mental abnormality, mental disease and deterioration, epilepsy and the like. In this institution 65.8 per cent. of the inmates were classifiable in terms of deviation from normal mental health. Of the women inmates of the prison 42.8 per cent. were found to be feeble-minded. In the two typical county jails studied 34 per cent. of the inmates were feeble-minded, with a mental level of ten years or under. Of 122 immoral women examined 43.5 per cent. were found to be feeble-minded. The present policy of treating these feeble-minded girls for venereal disease and then turning them into the community to acquire it over again is costly. Probably the greatest factor in the spread of venereal disease is the feeble-minded prostitute. Of 100 cases of juvenile delinquents studied in the juvenile courts, 17 per cent. were found to be feeble-minded, In one reformatory for boys, 15 per cent. were feeble-minded. In the State Reformatory for boys 24.1 per cent. were feeble-minded and in the State Training School for Girls 27 per cent. of the inmates were feeble-minded. These feeble-minded delinquent children later become the chronic habitues of the jails, courts and prisons. In the public schools 3.5 per cent.of the children examined were feeble-minded.

Control of Diphtheria by Cultures of the Noses and Throats of School Children.—Gloyne (*Jour. Am. Med. Assn.*, January 10, 1920) gives the results obtained in Kansas City, of which he is Health Commissioner. He says that the swabbing of the throats of the children should be a measure adopted at the outbreak of a single case of diphtheria in a school. The quarantine of carriers is as essential as is the quarantine of those suffering from diphtheria. Two negative cultures should be required as the minimum from all children who have had a positive culture. A negative culture means something, but it does not have the significance that a positive culture has. Antitoxin has a very definite place in giving immunity against diphtheria, but it does not kill the diphtheria bacillus. For this reason those who have had diphtheria may continue to be carriers for an indefinite time if great care is not taken to get at least two negative cultures. Carriers usually clear up in time without the use of antitoxin.

Methods of Administering Saline and Other Solutions to Infants and Children.—Aikman (*Jour. Am. Med. Assn.*, January 24, 1920) says that the administering of physiologic sodium chlorid and other solutions to replace fluids lost from the body is a valuable method of carrying certain cases over critical periods. Loss of fluid is often a more serious condition in children because of the vomiting that so often accompanies grave illness, and because of the difficulty of giving water by mouth. A relative acidosis may easily result, which in a few hours may greatly increase the gravity of the attack. The reduction of fluid is more marked in cases with a history of numerous watery stools characterized by a rapid loss of weight, hollow eyes, and drawn, pinched expression of the facies. The method of greatest service is that which will permit the introduction and retention of large amounts of fluid with the greatest ease to the operator and with the least discomfort and danger to the patient. The methods used are: Administration by mouth; rectal administration; hypodermoclysis; intravenous injection by the intrasinus method or by injection into the femoral vein; intraperitoneal injection. The author has done considerable work with this method and describes it in detail as follows: The instruments needed are a medium-sized intravenous needle, an infusion bottle and rubber tubing. The skin of the abdomen is carefully sterilized with tincture of iodin and alcohol. The skin and the subcutaneous tissue are picked up between the thumb and the forefinger, and the needle is introduced in an upward direction through the abdominal wall in the midline just below the umbilicus. Care must be taken to avoid piercing a distended bladder, and while there is also danger of puncturing the intestine, no record of this accident has been encountered. In cases in which necropsy was performed there was found a small hemorrhagic area in the abdominal wall and peritoneum, but no injury of serious importance. When the needle has passed into the abdominal cavity, the solution is introduced by gravity. It was found much easier to use the infusion bottle. Warm physiologic sodium chlorid solution has always been used, of which from 100 to 250 c.c. may be given every twelve to twenty-four hours. In older children 300 to 400 c.c. may be given and if no untoward signs develop it may be given until the abdomen is slightly distended. The injection must always be made slowly. After the operation the abdomen should be covered with a sterile dressing. It has been shown by the phenolsulphonephthalein test and by necropsy that from 40 to 60 per cent. of the fluid is absorbed in one hour. The remaining solution acts as a reserve, the gradual absorption of which explains the more protracted improvement in this method as compared to the results obtained by other methods.

Vomiting in Infants.—MARFAN (*Le Nourrison*, March, 1919) describes the vomiting of nursing children as a disease of habitual vomiting in nursing. The gastric mucous membrane is unduly sensitive and after each feeding there is a gastrospasm and the stomach casts up more or less of its contents. It is a gastric neurosis and this explains the variability of the findings in the chemistry of the stomach and of the stools. If the spasms include the bowel there is constipation. In some cases there is excessive swallowing of air. These children all show some neuropathic tendency. As regards the treatment, in some cases the treatment for inherited syphilis gives surprisingly good results. Sometimes a complete change of environment is necessary. The matter vomited in these conditions is usually a colorless fluid made up of whey, swallowed saliva and gastric juice, with floating clots of milk, as the vomiting does not occur immediately after taking food, but from fifteen minutes to one and a half hours after feeding. The vomiting may occur without effort or the child may be restless and scream and appear relieved after vomiting. Sometimes abruptly moving the child will bring on the vomiting.

GYNECOLOGY

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Conservative Myoma Operations.—The question of the advisability of performing myomectomy rather than hysterectomy in certain cases